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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,739	06/24/2005	Yunjung Choi	CU-4285 WWP	2917
26530	7590	02/22/2008		
LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			EXAMINER VANCHY JR, MICHAEL J	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 02/22/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/540,739

Applicant(s)

CHOI ET AL.

Examiner

Michael Vanchy Jr.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 09/23/2005.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 6 is objected to because of the following informalities: Where it states "at the step b)", examiner believes that the applicant means "at step b)," for appropriate grammar. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18, as submitted is open ended stating "The computer-readable recording medium as recited in claim 17, further including the steps of:" and nothing else follows. The examiner looked at the PGPUB and realized the same error had occurred, but in the PCT case there is a finished claim 18. If claim 18 were to be taken based upon the claim in the PCT, the rejection made to claim 18 would refer to claim 16 for it is the rejection to the method of this computer-readable recording medium.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al., US 7,209,571 B2.**

**Regarding claim 1**, Davis et al. (Davis) teaches an apparatus for describing three-dimensional image data (col. 2, lines 25-26), including characteristics of the three-dimensional image at an acquisition procedure (camera specifications), a representing procedure (compression format and instructions that control rendering of the image), and a display procedure (view region) (col. 11, line 15 to col. 12 line 5). The descriptor (metadata) is added (embedded) into the three-dimensional image, which comes from a database (col. 9, lines 22-28) or (metadata server Fig. 4). The three-dimensional image data with the descriptor (metadata) is then registered to a database or server (col. 12, lines 49-57).

**Regarding claim 2**, wherein adding the descriptors is adding the specified "data types" stated in Davis (col. 11 line 15, to col. 12 line 5). Therefore each descriptor is a "data type" that defines the metadata for that image.

**Regarding claim 3**, Choi et al. teaches individual descriptor databases which each store individually the acquisition, representation, and display data. Davis is silent on separating different databases for different descriptors, but does use different

metadata servers (Fig. 4) each which would allow specified "data types" to be incorporated into the image (col. 15, lines 28-38). Thus, it would be clear to one of ordinary skill that each metadata server can act as an individualistic database for each "data type."

**Regarding claim 4**, Choi et al. describes using a descriptor database that stores integrated descriptors and an adding means for incorporating the integrated descriptors into the three-dimensional image data. These integrated descriptors are combinations of two or more aforementioned descriptors. Davis teaches using various combinations of "data types" to be embedded into the image (col. 21, lines 24-26).

**Regarding claim 5**, see rejection made to claim 1, for it addresses the rejection made to the apparatus of this method.

**Regarding claim 6**, see rejection made to claim 2, for it addresses the rejection made to the apparatus of this method, however, claim 6 has the unique limitation of recognizing characteristics, which is determined though software/servers in Davis's invention (col. 17 lines 53-64) and (col. 15, lines 28-38).

**Regarding claim 7**, see rejection made to claim 4, for it addresses the rejection made to the apparatus of this method, however, claim 7 has the unique limitation of determining whether there is an integrated descriptor, which is determined though servers in Davis's invention (col. 15, lines 28-38).

**Regarding claim 8**, see rejection made to claim 1, for it addresses the rejection made to the apparatus of this computer-readable recording media.

**Regarding claim 9**, see rejection made to claim 7, for it addresses the rejection made to the method of this computer-readable recording media.

**Regarding claim 10**, Choi et al. describes an apparatus for retrieving three-dimensional image data. Davis teaches an apparatus for describing three-dimensional image data (col. 2, lines 25-26), including characteristics of the three-dimensional image at an acquisition procedure (camera specifications), a representing procedure (compression format and instructions that control rendering of the image), and a display procedure (view region) (col. 11, line 15 to col. 12 line 5). The descriptor (metadata) is

added (embedded) into the three-dimensional image, which comes from a database (col. 9, lines 22-28) or (metadata server Fig. 4). The three-dimensional image data with the descriptor (metadata) is then registered to a database or server (col. 12, lines 49-57). Davis also teaches abstracting a descriptor corresponding to the data inputted from the user, a comparison means comparison means for comparing the descriptor abstracted from the descriptor abstraction means with descriptors of three-dimensional image data stored in a three-dimensional image data database, and retrieving three-dimensional image data matched with the abstracted descriptor and outputting the image data (col. 13, line 56 to col. 14, line 16).

**Regarding claim 11**, Davis teaches abstracting one or more fields of the metadata, including but not limited to, an acquisition descriptor for describing a step of acquiring the three-dimensional image data, a representing descriptor for describing a step of representing the three-dimensional image data, and a display descriptor for describing a step of displaying the three-dimensional image data, from the descriptor database (col. 13, lines 56-67).

**Regarding claim 12**, Choi et al. teaches individual descriptor databases which each store individually the acquisition, representation, and display data. Davis is silent on separating different databases for different descriptors, but does use different metadata servers (Fig. 4) each which would allow specified "data types" to be incorporated into the image (col. 15, lines 28-38). Thus, it would be clear to one of ordinary skill that each metadata server can act as an individualistic database for each "data type."

**Regarding claim 13**, Choi et al. describes using a descriptor database that stores integrated descriptors and an abstraction means for abstracting out of the integrated descriptor database an integrated descriptor corresponding to the data inputted from the input means. These integrated descriptors are combinations of two or more aforementioned descriptors. Davis teaches using various combinations of "data

types" to be embedded into the image (col. 21, lines 24-26) and the ability to abstract these "data types" in combinations (col. 13, lines 56-67).

**Regarding claim 14**, see rejection made to claim 10, for it addresses the rejection made to the apparatus of this method.

**Regarding claim 15**, see rejection made to claim 11, for it addresses the rejection made to the apparatus of this method including user input.

**Regarding claim 16**, see rejection made to claim 13, for it addresses the rejection made to the apparatus of this method, however, claim 16 has the unique limitation of determining whether there is an integrated descriptor, which is determined though servers in Davis's invention (col. 15, lines 28-38).

**Regarding claim 17**, see rejection made to claim 10, for it addresses the rejection made to the apparatus of this computer-readable recording media.

### **Contact**

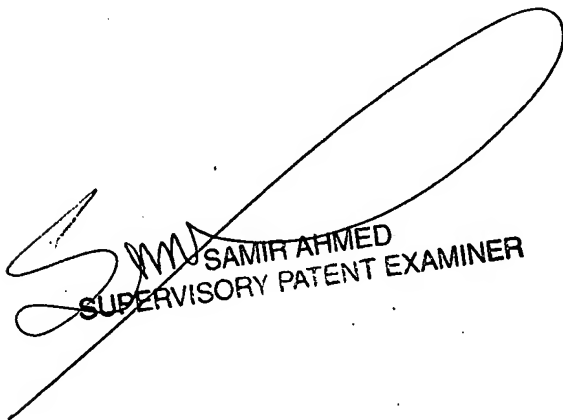
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vanchy Jr. whose telephone number is (571) 270-1193. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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